

# SRF



## ULTIMATE PRECISION USING LED OR LASER EMISSIONS FOR HIGH RESOLUTION

- Visible red emission models
- High resolution LASER models
- Sensitivity adjustment trimmer and dark/light selectors
- Industrial metal housing with glass lenses

### APPLICATIONS

- Packaging and labeling machinery
- Automotive
- Packaging lines

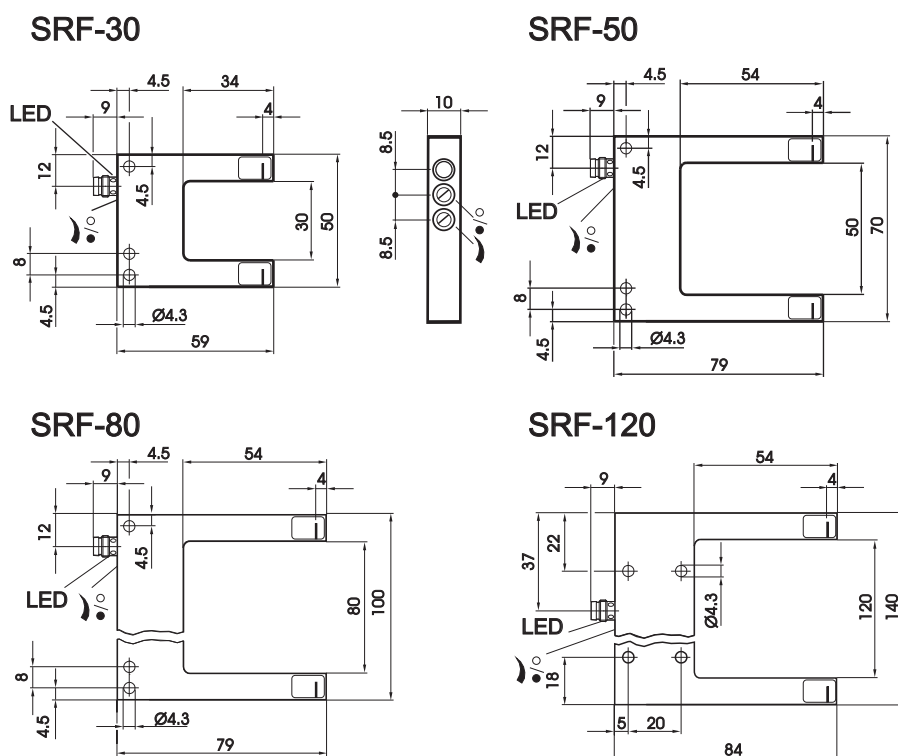


SRF-30/50/80/120	
<b>Slot width</b>	30 mm (SRF-30)
	50 mm (SRF-50)
	80 mm (SRF-80)
	120 mm (SRF-120)
<b>Slot depth</b>	34 mm (SRF-30)
	54 mm (SRF-50/80/120)
<b>Switching frequency</b>	1,5 kHz
	5 kHz (class 2 LASER)
<b>Light emission</b>	red LED
	red LASER (class 2)
<b>Setting</b>	trimmer
	10...30 V
<b>Power supply</b>	Vdc
	Vac
	Vac/dc
<b>Output</b>	PNP
	NPN
	NPN/PNP
	relay
	other
<b>Connection</b>	cable
	connector
	pig-tail
<b>Approximate dimensions (mm)</b>	10x50x59 (SRF-30)
	10x70x79 (SRF-50)
	10x100x79 (SRF-80)
	10x140x84 (SRF-120)
<b>Housing material</b>	Aluminium
<b>Mechanical protection</b>	IP67

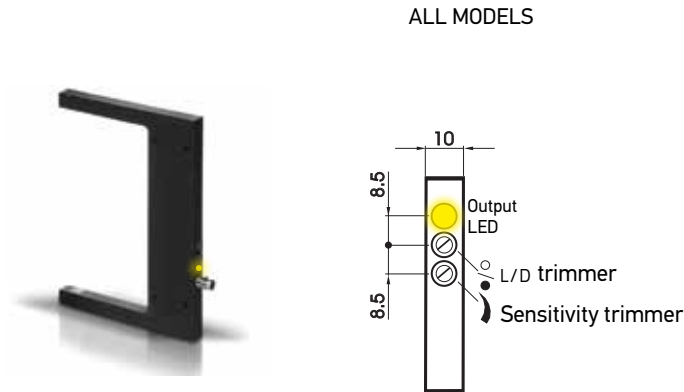
# TECHNICAL DATA

<b>Power supply</b>	10 ... 30 Vdc (reverse polarity protection)
<b>Ripple</b>	2 Vpp max.
<b>Consumption (output current excluded)</b>	35 mA max. 20 mA max. (Laser mod.)
<b>Light emission</b>	red LED 640 nm red Laser 650 nm
<b>Setting</b>	sensitivity trimmer and N.O./N.C. trimmer
<b>Operating mode</b>	LIGHT/DARK configurable
<b>Indicators</b>	yellow LED
<b>Output</b>	PNP or NPN; NO; NC
<b>Output current</b>	200 mA max.
<b>Saturation voltage</b>	3 V max. PNP, 2,5 V max. NPN
<b>Response time</b>	333 µs 100 µs (Laser mod.)
<b>Switching frequency</b>	1,5 kHz 5 kHz (Laser mod.)
<b>Connection</b>	M8 3-pole connector
<b>Dielectric strength</b>	500 Vac, 1 min between electronics and housing
<b>Insulating resistance</b>	>20 MΩ, 500 Vdc between electronics and housing
<b>Electrical protection</b>	class 1
<b>Mechanical protection</b>	IP67
<b>Ambient light rejection</b>	5 kLux
<b>Vibrations</b>	0,5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
<b>Shock resistance</b>	11 ms (30 G) 6 shock for every axis (EN60068-2-27)
<b>Slot width</b>	30, 50, 80, 120 mm
<b>Resolution</b>	0,3 mm (mod. SRF...30), 0,5 mm (mod. SRF...50/80), 0,8 mm (mod. SRF...120) 0,05 mm (Laser mod. SRF...30), 0,08 mm (Laser mod. SRF...50), 0,1 mm (Laser mod. SRF...80), 0,15 mm (Laser mod. SRF...120)
<b>Housing material</b>	Gd-Zn Alloy
<b>Lens material</b>	glass
<b>Operating temperature</b>	-10 ... 60 °C
<b>Storage temperature</b>	-20 ... 70 °C
<b>Weight</b>	36 g (mod. SRF...30), 54 g (mod. SRF...50), 77 g (mod. SRF...80), 118 g (mod. SRF...120) 66 g (Laser mod. SRF...30), 110 g (Laser mod. SRF...50), 135 g (Laser mod. SRF...80), 210 g (Laser mod. SRF...120)

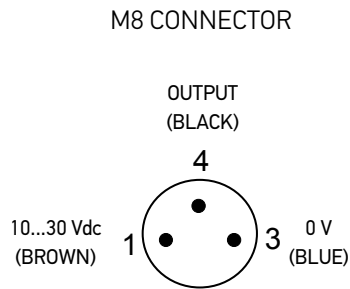
## DIMENSIONS



# INDICATORS AND SETTINGS



# CONNECTIONS



# MODEL SELECTION AND ORDER INFORMATION

OPTIC FUNCTION	EMISSION	CONNECTION	OUTPUT	MODEL	ORDER No.
Fork sensor (30 mm)	Red LED	M8 Connector	PNP	SRF-30-5-P	95B020050
	LASER		NPN	SRF-30-5-N	95B020090
Fork sensor (50 mm)	Red LED	M8 Connector	PNP	SRF-L-30-5-P	95B020130
	LASER		PNP	SRF-50-5-P	95B020060
Fork sensor (80 mm)	Red LED	M8 Connector	NPN	SRF-50-5-N	95B020100
	LASER		PNP	SRF-L-50-5-P	95B020140
Fork sensor (120 mm)	Red LED	M8 Connector	PNP	SRF-80-5-P	95B020070
	LASER		NPN	SRF-80-5-N	95B020110
Fork sensor (120 mm)	Red LED	M8 Connector	PNP	SRF-L-80-5-P	95B020150
	LASER		PNP	SRF-120-5-P	95B020080
Fork sensor (120 mm)	Red LED	M8 Connector	NPN	SRF-120-5-N	95B020120
	LASER		PNP	SRF-L-120-5-P	95B020160

# CABLES

TYPE	DESCRIPTION	LENGTH	MODEL	ORDER No.
Axial M8 connector	3-pole, Grey, P.V.C.	3 m	CS -B1-01-G-03	95A251490
		5 m	CS -B1-01-G-05	95A251510
Radial M8 connector		3 m	CS -B2-01-G-03	95A251500
		5 m	CS -B2-01-G-05	95A251520

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